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SPECIFICATION FOR

Procurement of Portable Exhaust Equipment and Replacement Filters

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RECORD OF REVISION

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Title

Specification for Procurement of Portable Exhaust Equipment and Replacement Filters

	CHANGE CONTROL RECORD	
Revision	Description of Change	Authorized for Release
0	This specification supersedes HS-V-P-4038, Rev. Basic	

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1.0 SCOPE

This specification is for the procurement of portable High Efficiency Particulate Air (HEPA) exhaust units and replacement filters which are used in temporary contamination control and environmental clean up. These are normally sized to 2000 cubic feet per minute (CFM) or less. These instructions do not include and are not intended to apply to permanently installed air handling systems equipped with nuclear grade HEPA filters.

2.0 DOCUMENTS

The referenced documents are part of this specification to the extent specified herein. The most current revision applies.

- 1. <u>Department of Defense Military Specifications (MIL)</u>
 - ! MIL-STD-282 Filter Units, Protective Clothing, Gas Mask Components, and Related Products: Performance Tests.
- 2. Institute of Environmental Sciences (IES)
 - ! IES-RP-CC-001-86 Recommended practice covering basic provisions for HEPA filter as basis for agreement between Buyers and Sellers.

3.0 DESIGN REQUIREMENTS

- 1. The HEPA filtered portable exhaust equipment and replacement HEPA filters shall meet the following minimum operating conditions:
 - a. CFM: 2000 or less
 - b. Temperature: 200 degrees F (93 degrees C) continuous operation.
 - c. Relative humidity: 90% maximum.
 - d. Non-corrosive environment: Filter air stream and ambient atmosphere shall be free of acid, caustic and organic vapors.
- 2. Equipment offered shall meet the minimum guidelines established in the Institute of Environmental Sciences Recommended Practices for HEPA Filters (IES-RP-CC-001-86), paragraphs 4.1.2, 4.2.1, 5.2, 6.1, 6.1.1 through 6.1.8, 8.7.3, and 9.1.
- 3. Electrical components shall be UL approved.
- 4. Air handling units shall have locking caster wheels.

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5. Air handling units shall be designed so that the unit operates on a negative pressure downstream of the filters. (i.e., All air must travel through the filters before moving through the fan housing.)

4.0 PACKAGING, SHIPPING AND STORAGE

Each portable HEPA exhaust unit and replacement filter shall be packaged in order to provide shock protection and prevent damage during handling, shipping and storage.

5.0 QUALITY ASSURANCE PROVISIONS

1. Acceptance Inspection and Testing

- a. The Seller shall supply evidence of compliance with the requirements of this specification.
- Payment will not be made by the Buyer until each portable HEPA exhaust unit has been inspected by Quality Assurance, and tested and accepted by Vent and Balance.
 Payment will not be made by the Buyer until each replacement HEPA filter has been inspected and accepted.
- c. Each portable HEPA exhaust unit and/or replacement HEPA filter shall be inspected for visible damage, evidence of poor workmanship and errors in manufacture. Minor imperfections shall be acceptable provided they do not compromise the functional performance. Any minor imperfections must be random in type in any lot. Any imperfections exceeding 20% of that lot, indicating lack of quality control, shall be cause for rejection of the entire lot.
- d. Equipment and filters that do not meet the requirements shall be tagged with a "rejected" slip by Quality Assurance, noting the reasons for the rejection.
- e. The Supplier shall be notified by the Buyer of the rejection, including the nature of the rejection. The Supplier shall provide replacement items until the stipulated quantity has been found acceptable, unless otherwise negotiated between the Buyer and Supplier.

2. **Optional Testing**

The Buyer may elect to have additional testing performed by a Department of Energy (DOE) Filter Test Facility. In addition to the aforementioned testing and acceptance criteria, Buyer acceptance and payment shall be dependent on meeting these additional test requirements.

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6.0 APPENDIX: INSTRUCTIONS FOR COMPLETING THE REQUISITION

The following steps are instructions for completing the Requisition, when using this specification.

- 1. Attach a copy of Sections 1-5 of this specification to the Requisition.
- 2. Provide the following information in the Requisition (order and format):

PORTABLE HEPA EXHAUST UNITS AND/OR REPLACEMENT FILTERS SHALL BE IN ACCORDANCE WITH SPECIFICATION WHC-S-0463, REV.0.

SELLER SHALL PROVIDE CERTIFICATION THAT PORTABLE HEPA EXHAUST UNITS AND/OR REPLACEMENT FILTER MEETS THE TEST REQUIREMENTS IDENTIFIED IN THE SPECIFICATION.

PACKAGING, SHIPPING AND STORAGE SHALL BE IN ACCORDANCE WITH THIS SPECIFICATION

Exceptions:
Quantity, Name and Intended Use (e.g., 6 ea. HEPA exhaust unit, replacement HEPA filter, contamination control)
Type/Air Flow (e.g., portable unit, 1000 CFM)
Filter Size/To Fit (e.g., filter size - 24" x 24" x 11 1/2", to fit HEPA exhaust unit).
Manufacturer/Model Number
Filter/Mounting Frame Seal (e.g., Neoprene strip gasket, downstream end)

Any Minimum Design Criteria (e.g., stainless steel, voltage/current ratings unit, size,

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capacity)

3. At a minimum, Industrial Hygiene, Quality Assurance and Radiation Control Engineering shall sign the Requisition.